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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,677	12/28/2001	Daniel Tatarka	05788.0180	4632

7590 03/22/2005  
Finnegan, Henderson, Farabow,  
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1300 I Street, N.W.  
Washington, DC 20005-3315

EXAMINER
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ARTMAN, THOMAS R

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/035,677

Applicant(s)

TATARKA ET AL.

Examiner

Thomas R. Artman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 10, 11, 14-17, 19 and 21 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9, 12, 13, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 8, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Chastain (US 6,853,781).

Regarding claim 1, Chastain discloses a cable (Fig.5), including:

- a) a central strength member 42,
- b) a buffer tube 20, #1, stranded around the central strength member 42, the buffer tube loosely housing at least one optical fiber (not shown),
- c) a first conduit 20, #2, that is configured to receive at least one first blown optical fiber and positioned external to the central strength member, and
- d) an outer jacket 44 positioned at the periphery of the cable.

Examiner's note: the added limitation "[the at least one optical fiber] placed in the buffer tube precedent to an installation of the cable" has not been afforded patentable weight because this process limitation does not provide a structural distinction over the prior art of record.

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With respect to claim 3, the central strength member is solid.

With respect to claim 4, Chastain further includes an inner jacket 46 positioned inside the outer jacket and surrounding at least the central strength member and the buffer tube.

With respect to claim 8, the first conduit is positioned inside the inner jacket.

With respect to claim 10, the strength members are stranded (plural members, see col.4, lines 63-67).

With respect to claim 11, Chastain further comprises a first water blocking layer 46 surrounding the central strength member.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain, as applied to claim 1 above, in view of Sutehall (US 2004/0037522).

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Chastain does not specifically disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutehall teaches the practice of having a central strength member with a bore for just such a purpose (p.1, par.16 and p.2, par.23). The tubular central strength member is lighter in weight than a solid strength member, and it allows the future addition of blown optical fibers without expanding the size of the cable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the central strength member of Chastain to have a bore configured to receive at least one central blown optical fiber because the cable is lighter in weight as a result and further allows for additional blown optical fibers without an increase in size of the cable.

Claims 14, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain in view of Cain (US 5,046,815).

Regarding claim 14, Regarding claim 1, Chastain discloses a cable (Fig.5), including:

- a) a central strength member 42,
- b) a first conduit 20, #3, that is configured to receive at least one first blown optical fiber subsequent to an installation of the cable and positioned external to the central strength member, and
- c) an outer jacket 44 positioned at the periphery of the cable.

Chastain does not disclose a conductor of electrical energy being included.

Cain teaches the practice of having blown electrical conductors 42 and 44 in the same cable as that of blown optical fibers. This provides greater flexibility such that multiple

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communication needs, electrical and optical, are able to be accommodated in the same cable.

This negates the need for installing multiple cables and allows for a more efficient, economical system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an electrical conductor in an optical fiber cable such that a simpler, economical communication system can be realized.

With respect to claim 16, the central strength member is solid.

With respect to claim 17, Chastain further includes an inner jacket 46 positioned inside the outer jacket and surrounding at least the central strength member and the buffer tube.

With respect to claim 21, Chastain further discloses a buffer tube 20, #4, that loosely houses at least one optical fiber (not shown) and is stranded around the central strength member.

Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain and Cain, as applied to claim 14 above, in view of Sutehall.

With respect to claim 15, neither Chastain nor Cain specifically disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutehall teaches the practice of having a central strength member with a bore for just such a purpose (p.1, par.16 and p.2, par.23). The tubular central strength member is lighter in

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weight than a solid strength member, and it allows the future addition of blown optical fibers without expanding the size of the cable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the central strength member of Chastain to have a bore configured to receive at least one central blown optical fiber because the cable is lighter in weight as a result and further allows for additional optical fibers without an increase in size of the cable.

With respect to claim 19, Chastain's first conduit is positioned inside the inner jacket 46.

#### ***Allowable Subject Matter***

Claims 5-7, 9, 12, 13, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1 and 4 and further having the first conduit positioned outside the inner jacket, as required by claim 5.

Claims 6 and 7 are indicated as allowable by virtue of their dependency.

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1, 4 and 8 and further having a second conduit for receiving at least one blown optical fiber, where the conduit is positioned outside the inner jacket as required by claim 9.

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1 and 11 and further having an outer strength member located substantially parallel to the central strength member and inside the outer jacket, as required by claim 12.

Claim 13 is indicated as allowable by virtue of its dependency.

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 14 and 15 and further having the first conduit positioned outside the inner jacket, as required by claim 18.

Claim 20 is indicated as allowable by virtue of its dependency.

### ***Response to Arguments***

Applicant's arguments, filed January 28<sup>th</sup>, 2005, with respect to claim 1 have been fully considered and are persuasive. Specifically, the "central inner duct" cannot be considered a central strength member. Therefore, the 35 USC 102(b) rejection of claim 1 over Quistorff (US 6,101,304) has been withdrawn. As a result, claim 12 has been objected to as having allowable subject matter and being dependent upon a rejected base claim. The remaining claims have previously been rejected over other grounds, which have been maintained above.



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However, Applicant's arguments filed January 28<sup>th</sup>, 2005, with respect to claims 1 and 14 have been fully considered but they are not persuasive. Applicants assert that Chastain does not disclose a conduit for accepting blown optical fibers, which is incorrect since Chastain is quite explicit in the Title, Abstract, and nearly every paragraph of the disclosure that the tubes 20 are designed for the specific purpose of accepting blown optical fibers. Applicants also assert that Cain does not disclose a conductor of electrical energy, which is also erroneous because copper wires are fundamentally conductors of electrical energy, and the voice/data communications carried by the copper wires of Cain are inherently electrical.

Applicants further assert that Chastain does not disclose a buffer tube for loosely housing an optical fiber precedent to an installation of the cable. The examiner respectfully disagrees.

The tubes of Chastain are buffer tubes as claimed; they loosely house and provide a buffer for optical fibers.

Furthermore, regarding the Examiner's Note in the above rejection to claim 1, Applicants have not established how the added process limitation results in a structure that is different from the prior art of record. The examiner maintains that the cable structure of the prior art is the same as the resulting structure of the claimed invention. After installation, the cables of both the prior art and claim 1 have at least one buffer tube loosely housing at least one optical fiber, and both have at least one conduit that has at least one blown optical fiber, regardless of the differences in which the order of the individual elements are installed.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chastain (US 2003/0035635) is the pre-grant publication of the above-cited patent to the same inventive entity (see front face of patent). Iwasaki (US 6,415,084) teaches hybrid optical/electrical cable systems. Blazer (US 6,424,772) teaches the practice of having voids for adding blown optical fibers, electrical wires, etc., into the voids.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

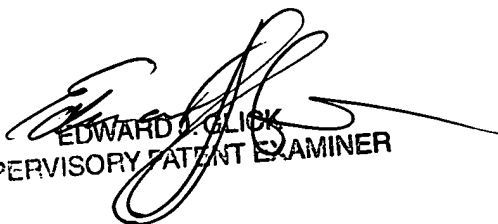
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Artman whose telephone number is (571) 272-2485. The examiner can normally be reached on 9am - 6:30pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas R. Artman  
Patent Examiner



EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER